



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Paula Syrjarinne

Attorney Docket No.: 944-001.48-3

Application No.: 10/693,261

Group No.: To be assigned

Filed: October 24, 2003

Examiner: To be assigned

For: TWO-STAGE INTERACTING MULTIPLE MODELS FILTER FOR USE IN A GLOBAL POSITIONING SYSTEM

Commissioner for Patents
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Applicant submits herewith references of which they are aware, which they believe may be material to the examination of this application and in respect of which they may have a duty to disclose in accordance with 37 CFR 1.56.

While this Information Disclosure Statement may be "material" pursuant to 37 CFR 1.56, it is not intended to constitute an admission that any document referred to herein is "prior art" for this invention unless specifically designated as such.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined under 37 CFR 1.56(a) exists.

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to:
Commissioner for Patents, P.O. Box 1450,
Alexandria, VA 22313-1450.

Jodie Droniak 2/25/04
Jodie Droniak Date

The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing of a first Office action on the merits, whichever occurs last and so the undersigned respectfully submits that no fee is due for filing this IDS. Should any fees be due of which the undersigned is unaware, the Commissioner is hereby authorized to charge deposit account 23-0442 any fee deficiency required to submit this IDS.

A PTO-1449 and some cited references are enclosed. Others of the cited references were provided in the parent case of this application; i.e. in the case for application serial number 09/864,080, and will be provided as soon as possible.


Respectfully submitted,

Date: 24 Feb. 2004

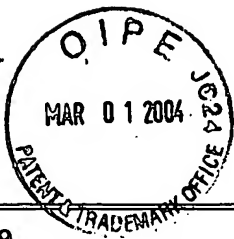
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Sheet 1 of 3

FORM PTO-1449
INFORMATION DISCLOSURE STATEMENTATTY DOCKET NO.
944-001.048-3SERIAL NO.
10/693,261

APPLICANTS: Jari Syrjärinne

FILING DATE:
Oct. 24, 2003

ART UNIT: to be assigned

UNITED STATES PATENT DOCUMENTS

| EXAM. INITIAL | | DOCUMENT NUMBER | DATE | INVENTOR/ASSIGNEE | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|------------------|--|--------------------|------|-------------------|-------|----------|-------------------------------|
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FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | INVENTOR/ASSIGNEE | CLASS | SUBCLASS | TRANSLATION YES/NO |
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| | | | | | | | |

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

| | | |
|--|--|--|
| | | GPS Positioning, Filtering and Integration by J. Chaffee, J. Abel, and B. McQuiston, IEEE Aerospace and Electronics Conference 1993 |
| | | Position Fix from Three GPS Satellites and Altitude: A Direct Method by M. Phatak, M. Chansarkar, and S. Kohli, IEEE Transactions on Aerospace and Electronic Systems, Vol. 35 (1), January 1999 |
| | | Understanding GPS: Principles and Applications by Elliot D. Kaplan, pgs. 25-27, Artech House Publisher, 1996 |
| | | An Algebraic Solution of the GPS Equations by S. Bancroft, IEEE Transactions on Aerospace and Electronic Systems, Vol. 21 (7), January 1985 |
| | | Tracking a 3D Maneuvering Targets With Passive Sensors by F. Dufour and M. Mariton, IEEE Transactions on Aerospace and Electronic Systems, Vol. 27 (4) July 1991 |
| | | Multisensor Tracking of a Maneuvering Target in Clutter by A. Houles and Y. Bar-Shalom, IEEE Transactions on Aerospace and Electronic Systems, Vol. 25 (2) March 1989 |
| | | The GPS Filtering Problem, J. Chaffee, J. Abel, IEEE Position, Location and Navigation Symposium 1992 |

Examiner

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| FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT | | | | ATTY DOCKET NO. 944-001.048-3 | | SERIAL NO. 10/693,261 | |
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| UNITED STATES PATENT DOCUMENTS | | | | | | | |
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| FOREIGN PATENT DOCUMENTS | | | | | | | |
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| | | | | | | | |
| OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.) | | | | | | | |
| | | A tracking algorithm for both highly maneuvering and nonmaneuvering targets, Efe, M. et al; Decision and Control, 1997. Proceedings of the 36th IEEE Conference on San Diego, CA, USA 10-12 Dec. 1997, New York, NY, USA, IEEE, US, pages 3150-3155. | | | | | |
| | | Enhanced accuracy GPS navigation using the interacting multiple model estimator; Xiangdong Lin, et al; 2001 IEEE Aerospace Conference Proceedings (Cat. No. 01TH8542), 2001 IEEE Aerospace Conference Proceedings, Big Sky, MT, USA 10-17 March 2001; pages 4/1911-23, Vol. 4. | | | | | |
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| UNITED STATES PATENT DOCUMENTS | | | | | | | |
| EXAM. INITIAL | | DOCUMENT NUMBER | ISSUE/PUBL DATE | INVENTOR/ASSIGNEE | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
| | US | 4,578,678 | 03/1986 | Hurd | | | |
| | US | 5,373,531 | 12/1994 | Kawasaki | | | |
| | US | 5,740,048 | 04/1998 | Abel et al | | | |
| | US | 6,127,970 | 10/2000 | Lin | | | |
| | US | 6,144,918 | 11/2000 | Meng et al | | | |
| | US | 6,317,688 | 11/2001 | Bruckner et al | | | |
| | | | | | | | |
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| OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.) | | | | | | | |
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